

DEDICATION

God, thank you for your blessing, I was able to do this research. My parents, your prayers and support are everything. My family, wife, and children thank you for being here with this research. It is a motivation for me.

Finally, I dedicate this research to those who are involved in this research field, hopefully, it will provide some benefits. Thank you for the knowledge and experience provided for all partners, my supervisors Ir. Ari Moesriami Barmawi, M.Sc., Ph.D. and everyone involved.